ComEd Ex. 7.0

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission	:	
On Its Own Motion	:	
-vs-	:	No. 08-0532
Commonwealth Edison Company	:	
	:	
	:	
Investigation of Rate Design Pursuant	:	
To Section 9-250 of the Public Utilities Act	:	

Rebuttal Testimony of

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Vice President of
Brown, Williams, Moorhead & Quinn, Inc.

On Behalf of
Commonwealth Edison Company

June 19, 2009

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I. INTRODUCTION OF WITNESS

Q. What is your name, title and business address?

A. My name is Alan C. Heintz. I am a Vice President of Brown, Williams, Moorhead & Quinn, Inc. ("BWMQ"). My business address is 1155 15th Street, NW, Suite 400, Washington, DC 20005.

Q. Have you previously submitted testimony in this proceeding?

A. Yes. I previously submitted Direct Testimony on behalf of Commonwealth Edison Company ("ComEd"), which testimony (ComEd Ex. 3.0) presented the Company's embedded cost of service study ("ECOSS"), ComEd Ex. 3.1, 3.2, 3.3, and 3.4.

II. PURPOSE OF TESTIMONY AND SUMMARY OF CONCLUSIONS

Q. What is the purpose of your rebuttal testimony in this docket?

A. My rebuttal testimony addresses the direct testimony of the following witnesses of the Illinois Commerce Commission (the "Commission" or "ICC") Staff ("Staff") and Intervenors ("Intervenors") who commented on ComEd's ECOSS:

- Staff witness Peter Lazare (Staff Ex. 1.0); and
- City of Chicago ("City") witness Edward C. Bodmer (City Ex. 1.0);

My rebuttal testimony also describes and discusses the Revised ECOSS, ComEd Exs. 7.1, 7.2, 7.3, and 7.4, that ComEd is providing to update the ECOSS that was filed with my direct testimony in this docket and was identified as ComEd Exs. 3.1, 3.2, 3.3 and 3.4. I note that the last version of the ECOSS filed as a rebuttal exhibit by ComEd in its most recent rate case (Docket No. 07-0566, the "2007 Rate Case"), therein identified as

ComEd Ex. 33.1—the "Original ECOSS"—is the basis for all adjustments that have been made to calculate the Revised ECOSS.

Q. Are you sponsoring exhibits in addition to your testimony?

A. Yes. I am sponsoring ComEd Ex. 7.1, the Revised ECOSS, consisting of Schedules 1a (Functionalization), 1b (Function Factors), 2a (Allocation) and 2b (Allocation Factors). This exhibit shows the combined effects on the detailed cost allocation among classes on Schedule 2a (lines 192 through 228) resulting from differentiating between primary and secondary lines, revising the allocation of uncollectible expenses among the residential classes and revising the weights for the "Services" allocator. I am also sponsoring ComEd Exs. 7.2, 7.3, and 7.4, which I describe later in my testimony.

Q. Would you please summarize your conclusions?

A. I conclude that (1) the Commission should not order the change in allocation factor—from Non Coincident Peak ("NCP") to Coincident Peak ("CP")—for primary distribution facilities, as recommended by Staff witness Lazare; (2) the Commission should not accept any of the recommendations of City witness Bodmer; and (3) the Commission should accept the modifications proposed by ComEd to the ECOSS, specifically, the proposed split of distribution facilities into primary and secondary voltages and the revisions to the Services allocator.

III. COMMENTS ON THE TESTIMONY FILED BY STAFF WITNESS LAZARE

Q. What issue about the ECOSS raised in the testimony of Staff witness Lazare do you address?

A. Mr. Lazare raises a number of concerns in his testimony including, for example, the manner in which ComEd determined the primary/secondary split of distribution facilities and the allocation of Services costs. ComEd witness Lawrence Alongi will address these items in his rebuttal testimony. (ComEd Ex. 6.0). In my testimony, I address Mr. Lazare's recommendation that ComEd should change the allocation of distribution substations and primary lines in the ECOSS from a NCP to a CP allocation. (*See*, Staff Ex. 1.0, 35:810-14).

Q. What seems to be the basis for Mr. Lazare's recommendation?

A. Most of Mr. Lazare's discussion of the allocation of distribution substations and primary lines focuses on an alleged "cost inequity" created by the ECOSS upon the lighting class. (*See id*., 35:810). "The NCP penalizes the lighting class which uses most of its electricity during off-peak, evening hours." (*See id*., 34:793-94). In the context of his concern about the lighting class(es), Mr. Lazare makes the following statement: "Distribution substations and primary lines serve not just the lighting class, but other classes as well and the level of demands they serve can be expected to rise and fall with overall system demands rather than with any individual class. When coincident demands are at their peak, it would be reasonable to assume that demands for distribution substations and primary lines will peak as well." (*See id*., 34:793-35:798). From this assumption, Mr. Lazare jumps directly to his conclusion: "This [use of CP] would recognize that the

size of these facilities is more clearly driven by system peak demands than by the demands of individual rate classes." (*See id.*, 35:812-14).

Q. Do you agree with Mr. Lazare's contention that the ECOSS, using an NCP allocation methodology for distribution substations and primary facilities, creates a "cost inequity" for the lighting classes?

A. No, I do not. As I discuss in more detail later in this testimony, the mere fact that an allocation methodology used in the ECOSS, such as NCP, does not recognize all possible "benefits" for any particular class and is not sufficient cause for jettisoning that methodology. The NCP methodology, pros and cons, as currently used in the ECOSS has been fully discussed before the Commission, and, following such discussion, the Commission has approved ComEd's use of the NCP allocation methodology and rejected alternative proposals. *See Commonwealth Edison Company*, Docket No. 01-0423, Interim Order at 128 (Apr. 1, 2002). In my view, given the Commission's prior determination on this matter, a proposal to change the allocation methodology must offer substantive evidence that (1) the assumption Mr. Lazare makes about cost causation is correct, and (2) the alleged benefits for the three lighting classes (which, together, comprise only 1.5% of the total distribution services revenue requirement) are not more than offset by detrimental effects on other classes (which comprise more than 98% of that revenue requirement).

Q. Does Mr. Lazare cite any precedent supporting his recommended change in allocation methodology?

A. No, he does not. When asked in a data request to identify electric utilities that use a 1-CP allocation for distribution substations and primary lines, he cited only two—neither of

which are jurisdictional to the Commission. Indeed, it is ComEd's methodology that has been approved by the Commission and my understanding is that this Commission has not approved for any electric utility the cost allocation methodology proposed by Mr. Lazare. Finally, Mr. Lazare has not proffered any specific evidence supporting his assertion that ComEd's planning for and sizing of primary facilities is "driven by system peak demands", rather than local area demands.

IV. COMMENTS ON THE TESTIMONY SPONSORED BY THE CITY OF CHICAGO

Q. What issues about the ECOSS raised by City witness Mr. Bodmer do you wish to discuss?

A. I will address several issues raised by Mr. Bodmer: (1) his general approach to critiquing the ECOSS methodology, (2) his specific discussions of the allocations of secondary wire and service drops that the ECOSS makes to the Dusk-to-Dawn lighting class, and (3) his discussion of and recommendation for the re-allocation of primary wire in the ECOSS.

Q. How do you wish to begin your rebuttal to Mr. Bodmer?

A. As preface to my comments on Mr. Bodmer's testimony, I believe it would be useful to discuss some basic facts about cost of service studies.

Q. What is the purpose of a cost of service study?

A. The purpose of a cost of service study is to determine in a systematic manner the utility's cost of providing each service or set of services to each group of customers—customer class. Because each service employs different mixes of the utility's resources and different groups of customers use the resources differently, the cost of service identifies the costs incurred to provide the service to the various customer classes. Therefore, a

cost of service must identify from the utility's total costs the various costs associated with the service(s) and the amount of each of the costs each customer class causes the utility to incur. The result of the cost of service study is to determine the costs that each customer class causes the utility to incur for each identified service.

Q. What are the two main types of cost of service studies?

A. The two main types are (1) Marginal Cost of Service Study ("MCOSS") and (2) the ECOSS. The MCOSS focuses on estimates of the incremental costs a utility may incur to provide additional volumes of services to each class. Therefore, the MCOSS does not look primarily to current, actual costs on the utility's books; it uses booked and other information to estimate how the utility's costs change with increments in service levels. The ECOSS, by contrast, organizes the utility's actual or budgeted ("embedded") costs as these are (or are expected to be) recorded on the utility's books of account. In short, the MCOSS asks the question: "How much extra will it cost the utility to provide a greater amount of service(s) to each customer class?"; the ECOSS asks the question: "How can the utility's booked expenses be allocated among customer classes to reflect, as accurately as the books will allow, how each class causes the utility to incur costs."

Q. How is an ECOSS performed?

A. The first step is to identify and organize the various different costs by functionalizing the costs by utility function (*i.e.*, production, transmission, distribution, customer, and general). When data is available, costs can also be subfunctionalized (functionalized in finer detail, *e.g.* primary voltage and secondary voltage facilities), allowing the study to allocate the costs with greater granularity to the various customer classes. For example, a customer class taking service only at primary voltage and not using secondary

distribution facilities would not be allocated costs associated with the secondary distribution facilities.

The next step is to identify how the utility incurs each functionalized cost, specifically whether the costs vary with changes in demand, energy, or number of customers. For example, distribution facility costs are classified based on demand, because the costs incurred are a function of area load, not the number of customers. Meanwhile, the cost of a call center is a function of the number of customers.

The third step, allocation, is the process of assigning the functionalized and classified costs to each of the various customer classes. The allocators used are not limited to simply the demands, energy consumption or number of customers in the classes. The allocators can be a weighted composite of the factors that cause the utility to incur the associated costs. For example, if there are two classes, Class 1 with 100 customers and Class 2 with 20 customers, and the cost of the meters for Class 1 are $10 and the cost of the meters for Class 2 are $15, an allocator based on the weighting of the number of customers and the cost of the meters can be used. In this example, the investment in meters for Class 1 would be 100 x $10, or $1000, while the investment for Class 2 would be 20 x $15, or $300. The result would allocate $1000/($1000+$300) (or 76.9%) of the meter investment to Class 1.

Q. What is the goal of an ECOSS?

A. An ECOSS seeks to attribute costs to individual services or groups of services based on the cost causation. Costs are recognized as being caused by a service or group of services if the costs are brought into existence as a direct result of providing the service or group of services or the costs are avoided if the service or group of services is not provided.

Applying the principle of cost causation in setting of rate structures and levels should be done wherever sufficient data is available. This is to ensure that customers are provided with the correct price signals when making a purchasing decision. Customers will only purchase services when the value they place upon them is at least as large as the resource costs of creating them. In the absence of externalities, this will lead to efficient purchasing decisions and the benefit to all customers will be maximized.

Q. Does an ECOSS produce a <u>precise</u> allocation of costs to customer classes?

A. No. I began this discussion by noting that an ECOSS is done in "a systematic manner", but this does not mean that precision is the objective. Rather, in the regulatory context, a "just and reasonable" result is the objective. It is important to remember that the accuracy of every cost of service study is limited (1) by the level of detail available in the underlying cost data, (2) by the number and specification of customer classes, and (3) by the amount of resources it is reasonable for the Commission, customers, and the utility to devote to preparing and analyzing the study. Given substantial additional resources, any ECOSS can be improved. Like many other issues of resource utilization, however, the Commission and utility must always consider that applying additional resources to refining the ECOSS may not be worth it—the law of diminishing returns comes into play.

Q. Does the Commission use an ECOSS based on cost causation for determining the relative amount of costs for each customer class?

A. Yes. The Commission has determined in prior cases that delivery service rates should be cost-based and relate to delivery service. *See*, *e.g., Commonwealth Edison Co*., Docket No. 01-0423, Order at 24 (Mar. 28, 2003). The Commission has also stated in prior cases that delivery service rates should be designed to reflect cost of service. *Illinois Power*

Co. d/b/a AmerenIP, et al., Docket Nos. 06-0070, 06-0071 and 07-0072 (consol.), Order at 175 (Nov. 21, 2006). The Commission has generally applied cost of service principles in varied contexts in prior delivery service cases. *See Commonwealth Edison Co.*, Docket No. 01-0423, Order at 137 (Mar. 28, 2003); *Commonwealth Edison Co.*, Docket No. 99-0117, Order at 57-58 (Aug. 26, 1999). While the Commission has in specific limited situations found that there can be circumstances that might warrant a departure from cost causation principles in the context of past delivery service cases, such departures have not been the norm.

Q. What are your comments on Mr. Bodmer's method of critiquing ComEd's ECOSS?

A. With respect, especially, to his comments and recommendations to the Commission regarding the allocation of costs to the Dusk-to-Dawn Lighting class, Mr. Bodmer's general methodology is to identify as many ways he can think of why an ECOSS, such as ComEd's ECOSS, is different from other kinds of studies that, in other circumstances, might be used to establish class revenue requirements. Indeed, it seems that Mr. Bodmer's purpose is to use this data to criticize the ECOSS for not being some other kind of study specifically an MCOSS or, perhaps, a directly-assigned cost of service study. However, the Commission's established policy over several previous ComEd rate cases has been that an MCOSS is not part of the filing requirements and the Commission has not used a marginal analysis in allocating ComEd's distribution services revenue requirement to classes.

Q. Is there a reason ComEd's ECOSS does not utilize the type of "on the ground" minutia of detail Mr. Bodmer seems to think is important in analyzing the Dusk-to-Dawn Lighting revenue requirement?

A. Yes. For the purpose to which the Commission uses the ECOSS, it would be overwhelmingly expensive, time-consuming and just plain inefficient to apply to all classes the type of analysis Mr. Bodmer thinks should be applied to the lighting classes. Indeed, Mr. Bodmer's method of analysis is highly reminiscent of many analyses—often at odds with each other—that the Commission was required to consider and wade through in years past when an MCOSS was part of the hearing record. In all of those hearings, to my knowledge, the Commission utilized the ECOSS as the primary basis for its inter-class revenue requirement allocation.

Q. Mr. Bodmer's testimony reflects lots of "detail" about the provision of Dusk-to-Dawn lighting services, but is the testimony always logical and accurate?

A. No, on both counts. In terms of logic, I note that on pages 35 and 36 of City Ex. 1.0, Mr. Bodmer provides two graphs: (1) "Allocated Cost of Secondary Wire as Percent of Total Cost of Service" and (2) "Service Drop Percent". As to the first graph, Mr. Bodmer makes the assertion: "Given the fact that the City owns and maintains all of the secondary wire between street lights, one would not expect the Dusk-to-Dawn lighting class to be allocated more secondary costs than any other class." (City Ex. 1.0, 35:801-03). He then offers as proof a graph showing the secondary wire component's share (about 16%) of the total revenue requirement of the Dusk-to-Dawn Lighting class, compared to the secondary component's share of the total revenue requirement of each other class. (The data were derived from ComEd's ECOSS, Ex. 3.1). This is an illogical

comparison and means nothing in the context of the claims he is making. The reason the secondary component's share of the total Dusk-to-Dawn revenue requirement is relatively high is because other component parts of the Dusk-to-Dawn Lighting revenue requirement are relatively low. Specifically, the Dusk-to-Dawn Lighting revenue requirement has a very low (relative) CP allocation of ComEd's substantial investment in high voltage substations and lines, plus a zero component for Uncollectible Expense and a zero component for directly-assigned plant.

Similarly, for Service Drops, Mr. Bodmer "sets up" his argument by positing the following hypothetical: "If the small amount of wire between the transformer and the City box is counted as secondary wire, there should be no service drop costs allocated to the class." (City Ex. 1.0, 35:812-36:814). Nevertheless, to his amazement, he finds "the Dusk-to-Dawn class is allocated a great deal of service drop costs—more than all the business classes except the watt hour and general lighting class." (*Id.*, 36:814-16). He then offers the graph "Service Drop Percent" as proof. But this graph, like the one discussed earlier, proves nothing: it is not about absolute comparisons among classes, but relative percentages of the Services revenue requirement component to the total for each class. In addition, Mr. Bodmer's underlying hypothesis is incorrect—services are, indeed, allocated to Dusk-to-Dawn Lighting, because ComEd incurs Services costs other than the drop to connect lighting.

In sum, the data does not (and cannot) show what Mr. Bodmer claims. It specifically does not contribute in any way to his thesis that "ComEd's embedded cost of service study has no credibility with respect to the City's street lights." (*Id.*, 36:818-19).

Q. Is there an alternate measure of how the ECOSS allocates costs to the lighting classes compared to other classes that the Commission should consider in the context of Mr. Bodmer's arguments?

A. One "bottom-line" measure of the results of the ECOSS allocation on classes is simply the average cost (revenue requirement) per kwh of energy consumption. This is easily calculated for each class, as shown on ComEd Ex. 7.1, Schedule 2a by dividing line 215 by line 234; the result (in cents per kwh) is shown on line 235. The overall average distribution services costs is 2.24 cents/kwh. The unit cost for Dusk-to-Dawn Lighting is 1.59 cents/kwh, which is about 30% lower than the system average and lower than seven of the 16 delivery classes/subclasses included in the ECOSS. Mr. Bodmer's statistical attempt to show that the Dusk-to-Dawn Lighting class is unfairly and disproportionately allocated costs does not withstand scrutiny.

Q. Can you give an example of the way Mr. Bodmer provides inaccurate information to the Commission to support his arguments?

A. Yes. In his discussion of the ECOSS' use of the NCP methodology to allocate primary wires, Mr. Bodmer makes the following assertion: "In recent years, ComEd has changed dramatically the way in which primary wires are allocated to the various classes." (City Ex. 1.0, 40:886-87). This is absolutely incorrect, and the fact that Mr. Bodmer later refers to an MCOSS filed many years ago by ComEd is specious, because it was never used to allocate distribution facilities.

Q. Has ComEd "changed" the way in which primary wires are allocated"?

A. No. Until this proceeding, ComEd's ECOSS did not distinguish between primary and secondary wires, and both were allocated to classes on the basis of NCP. Furthermore, as noted earlier, the Commission specifically approved this allocation methodology. In the current ECOSS, which separates primary and secondary facilities, ComEd continues to follow Commission precedent by allocating these facilities based on the NCP methodology. It is disingenuous of Mr. Bodmer to suggest otherwise.

Q. What seems to be the main point Mr. Bodmer is trying to make with his discussion of the differences among classes in "diversity"?

A. The entire discussion takes place over several pages of testimony, most particularly at City Exhibit 1.0, pages 40-46. The main point seems to be that if a class (like lighting or railroads) is defined in such a manner that all customers are virtually identical in the way they use electricity, there is no diversity. Somehow, this patently obvious fact would justify the Commission's abandoning the NCP methodology that it has approved not only for ComEd's ECOSS but for all other utilities in Illinois. Although Mr. Bodmer recognizes that the alternate allocation methodology he proposes conflicts with Commission precedent for ComEd, Ameren and other utilities it regulates, he rejects the notion as unimportant: "Maybe, but so what?" (*Id.*, 45:997).

Q. Is Mr. Bodmer's proposal in this docket to change the allocation methodology for primary facilities consistent with his past testimony before the Commission?

A. No. In Docket No. 01-0423, Mr. Bodmer advocated a 4-CP allocation methodology. The Commission rejected that recommendation, and the Commission should similarly reject the recommendation in this docket.

Q. Earlier you discussed in general the methodology underlying ComEd's ECOSS, and noted that the Commission has stated that class revenue requirements should reflect cost causation and electric rates should be cost based. Does Mr. Bodmer contend that the proposed allocations of costs in the latter portions of his testimony reflect cost causation?

A. No. Instead, for example, he equates Uncollectible Expense as a tax and concludes that costs associated with ratepayers not paying their bills must be socialized similar to a tax. Similarly, he proposes to reallocate several other customer-related costs based on energy or demand. However, these costs do not vary based on the amount of energy delivered or the customer demands. In my view, most of the recommendations Mr. Bodmer makes to the Commission in this docket represent a significant departure from the principles of cost causation that have guided the Commission's decision-making for many years.

V. COMED EXHIBITS 7.1, 7.2, 7.3, AND 7.4: REVISIONS TO THE ECOSS

Q. Are you sponsoring a Revised ECOSS?

A. Yes. ComEd Exhibit 7.1 is a Revised ECOSS, which incorporates the following changes from the Original ECOSS (ComEd Ex. 33.1 in the 2007 Rate Case):

(1) The Revised ECOSS incorporates the primary/secondary split of certain distribution facilities. How this split was accommodated in the ECOSS was described in detail in my direct testimony in this docket. (*See* ComEd Ex. 3.0, 6:115–9:186). The current Revised ECOSS differs from ComEd Exhibit 3.1 (filed with my direct testimony) in that ComEd has identified an additional plant account—Account No. 361 (Structures and Improvements)—as having both primary and secondary facilities. The analysis underlying this primary/secondary split is discussed in the rebuttal testimony of Mr. Alongi (ComEd Ex. 6.0). The current Revised ECOSS also reflects an updating of the allocation factor "NCP-SEC" in Schedule 2b of ComEd Exhibit 7.1.

(2) The Revised ECOSS incorporates a revision to the weighting factors employed to calculate the "Services" allocator. The analysis supporting the revisions of these weighting factors is also discussed in the testimony of Mr. Alongi (ComEd Ex 6.0).

(3) The Revised ECOSS incorporates the reallocation of uncollectible expense among residential classes using the fully-developed analysis in ComEd Ex. 3.1 filed with my direct testimony, and described therein. (*See*, ComEd Ex. 3.0, 9:187-10:211).

Q. Would you please describe ComEd Ex. 7.2?

A. ComEd Exhibit 7.2, page 1 shows the changes to the Original ECOSS of the combined effects of all changes described above—primary/secondary split and revised secondary NCP allocator, change in uncollectibles and change in weighting factors of the Services allocators—a net shift in revenue requirement to residential customers of approximately $34.7 million. Incorporating the primary/secondary distribution line distinction into the

ECOSS shifts about $38 million dollars of embedded costs to the residential classes and reduces the allocation of embedded costs to the larger customers by more than $45 million. (*See* ComEd Ex. 7.2, page 2). On the other hand, the revisions to the weighting factors of the Services allocator reduces the residential revenue requirement by about $0.9 million. (*See id.*, page 3).

The effect of this net shift to residential customers of about $34.7 million is not "revenue neutral" to ComEd. Rather, ComEd's total Uncollectible Expense increases by about $383,000, because revenues billed to residential customers have a higher experienced uncollectible percentage than revenues billed to commercial customers.

Q. What is the purpose of ComEd Exhibits 7.3 and 7.4?

A. ComEd Exhibit 7.3 shows the detailed cost of service allocated to classes (lines 192 through 228 of Schedule 2a of the Revised ECOSS) for the scenario whereby the Original ECOSS is changed only to accommodate the distinction between primary and secondary lines. ComEd Exhibit 7.4 shows the detailed cost of service allocated to classes (lines 192 through 228 of Schedule 2a of the Revised ECOSS) for the scenario whereby the Original ECOSS is changed only to accommodate the revision of the weighting factors underlying the Services allocator. These later two exhibits are the supporting calculations underlying pages 2 and 3 of ComEd Exhibit 7.2.

Q. Do you also have a similar exhibit that shows the detailed cost of service for the scenario whereby the Original ECOSS is only changed to accommodate the reallocation of uncollectible expenses among residential classes?

A. Yes. That information is provided in ComEd Ex. 3.4 That analysis has not changed.

VI. CONCLUSION

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.